



United States Department of Commerce National Oceanic and Atmospheric Administration

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NOAA Mission Goal: Weather and Water

The Weather is directly linked to public safety and nearly one-third of the US economy is sensitive to weather and climate. Floods, droughts, hurricanes, tornadoes, tsunamis, and other severe weather events cause over \$11 billion in damages each year in the US. Together with our partners, we seek to provide decision makers with key observations, analyses, prediction, and warnings for a range of weather and water conditions, including those related to water supply, air quality, and space weather.

What is W&W?

Weather and Water (W&W), one of four NOAA Mission Goals, coordinates the planning and programming of nearly \$860 million dollars across NOAA's Line Offices to serve society's needs for weather and water information. The desired outcomes of W&W and the measures of performance toward those outcomes are summarized in the table below.

Outcomes	Measures of Performance
Reduced loss of life, injury, and damage to the economy	Increased lead times and accuracy for W&W warnings and forecasts.
Better, quicker, and more valuable weather and water information to support improved decisions	Improved predictability of the onset, duration, and impact of hazardous and severe W&W events.
Increased customer satisfaction with weather and water information and services	Increased application and accessibility of W&W information as the foundation for creating and leveraging public, private and academic partnerships.
	Increased development, application, and transition of advanced science and technology to operations and services.
	Increased coordination of W&W information and services with integration of local, regional, and global observation systems.
	Reduced uncertainty associated with W&W decision tools and assessments.
	Enhanced environmental literacy and improved understanding, value, and use of W&W information and services.

Recent W&W Accomplishments

The Air Quality Forecast capability is fully operational in the northeastern United States providing hourly ozone forecast information. This is the first phase toward providing a national Air Quality Forecast capability.

The 2004 total of eight Atlantic tropical cyclones reaching hurricane strength in one season set a new record. In early September, a Congressional resolution was introduced to honor NOAA and its employees "for their dedication and hard work during Hurricanes Charley and Frances."

Air Quality

The Air Quality Program is a key component of the Nation's effort to address and respond to air pollution. The Program provides environmental policy makers and resource manager's information on the causes of poor air quality and tools to support effective decision-making. The Program also produces timely and accurate air quality forecasts so the public can take appropriate action to limit adverse effects of poor air quality.



Coasts, Estuaries, and Oceans

The Coasts, Estuaries, and Oceans (CEO) Program provides leadership for the nation's coastal communities and maritime users in risk and vulnerability mitigation from coastal natural phenomena and tools and data in support of coastal and oceanic resources stewardship, usage, and health. The CEO Program is chartered to ensure information about areas of land-sea-ocean interface is provided to connect our national coastal community and decision makers.

Environmental Modeling

The Environmental Modeling Program provides model-based estimates of current and future states of the environment at multiple time scales. These estimates are based upon a wide array of observational data and ever more refined modeling techniques. The program maintains a suite of operational models to meet current needs as well as a research and development program for improved performance and new capabilities in future generations of environmental models.

Hydrology

NOAA's Hydrology Program delivers valuable water information and predictions affecting all hydroclimatic conditions from floods to droughts. This includes high-resolution analyses of snow pack, precipitation, and soil conditions, and the nationally consistent production of water supply estimates, river flow forecasts and flood warnings that save lives and conserve America's water resources.

Local Forecasts and Warnings

The Local Forecast and Warning program puts "NOAA in your neighborhood" by delivering environmental forecast and warning services through its distributed field structure. LFW comprises the forecast process from observations, numerical model execution and forecast development, to dissemination, public education, and service assessment. With its media, emergency manager, and private sector partners, LFW services "touch every American every day."

Space Weather

NOAA's Space Weather Program is the Nation's source for official Space Weather information. It issues forecasts, warnings, and alerts to those most affected by space weather such as power grid operators, airlines, NASA, and communications companies. It also provides archive, data access, and research services.

Science, Technology and Infusion

The Science Technology and Infusion program performs state-of-the-art research and works with NOAA's service programs to infuse new science and technology into existing organizational structures via a strategic approach to prototyping, evaluation, acquisition and training.



For more information on NOAA's Weather and Water Goal contact Jenifer Rhoades at jenifer.rhoades@noaa.gov or 301-713-1975 x173.

W&W can also be found on the web at http://www.ppi.noaa.gov/weather_water/ww_index.html